



September 29, 2016

Tom Moe USS Corporation P.O. Box 417 8771 Park Ridge Dr Mountain Iron, MN 55768

RE: Project: NPDES TB-Wk3
Pace Project No.: 1275294

### Dear Tom Moe:

Enclosed are the analytical results for sample(s) received by the laboratory on September 21, 2016. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melisa M Woods

Massia Wirds

melisa.woods@pacelabs.com

Project Manager

**Enclosures** 

cc: Cory Hertling Terri Sabetti, NTS



315 Chestnut Street Virginia, MN 55792 (218) 742-1042



### **CERTIFICATIONS**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792

Alaska Certification #MN01084

Arizona Department of Health Certification #AZ0785

Minnesota Dept of Health Certification #: 027-137-445

North Dakota Certification: # R-203

Wisconsin DNR Certification #: 998027470

WA Department of Ecology Lab ID# C1007

Nevada DNR #MN010842015-1

Oklahoma Department of Environmental Quality

**Duluth Minnesota Cerification ID's** 

4730 Oneota St., Duluth, MN 55807

Minnesota Dept of Health Certification #: 027-137-152

Wisconsin DNR Certification #: 999446800

North Dakota Certification #: R-105





### **SAMPLE SUMMARY**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1275294001	SD 001 (Seep 020)	Water	09/21/16 10:40	09/21/16 13:10





## **SAMPLE ANALYTE COUNT**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1275294001	SD 001 (Seep 020)	EPA 1664A TPH (1999)	BT1	1	PASI-DUL
		USGS I-3765	BEM	1	PASI-V

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### **ANALYTICAL RESULTS**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

Date: 09/29/2016 03:32 PM

Sample: SD 001 (Seep 020)	Lab ID:	1275294001	Collected: 09/21/16 10:40			Received: 09/21/16 13:10 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1664 SGT-HEM, TPH	Analytical	Method: EPA	1664A TPH	(1999)					
Total Petroleum Hydrocarbons	ND	mg/L	3.0	1.1	1		09/27/16 15:40		
USGS I-3765 TSS	Analytical	Method: USG	S I-3765						
Total Suspended Solids	1.2	mg/L	1.0	1.0	1		09/27/16 11:53		

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### **QUALITY CONTROL DATA**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

QC Batch: 95419

QC Batch Method: EPA 1664A TPH (1999)

Analysis Method:

EPA 1664A TPH (1999) 1664 SGT-HEM, TPH

Associated Lab Samples: 1275294001

METHOD BLANK: 375841 Matrix: Water

Associated Lab Samples: 1275294001

> Blank Reporting MDL Parameter Units Result Limit Qualifiers Analyzed

Analysis Description:

Total Petroleum Hydrocarbons ND 3.0 1.0 09/27/16 15:40 mg/L

LABORATORY CONTROL SAMPLE:

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers 78 Total Petroleum Hydrocarbons mg/L 20 15.6 64-132

MATRIX SPIKE SAMPLE: 375843

Date: 09/29/2016 03:32 PM

MS 1275294001 Spike MS % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers ND 64-132 Total Petroleum Hydrocarbons 20.2 16.4 80 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



### **QUALITY CONTROL DATA**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

QC Batch: 95421 Analysis Method: USGS I-3765

QC Batch Method: USGS I-3765 Analysis Description: USGS I-3765 Total Suspended Solids

Associated Lab Samples: 1275294001

METHOD BLANK: 375855 Matrix: Water

Associated Lab Samples: 1275294001

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Suspended Solids mg/L ND 1.0 09/27/16 11:53

LABORATORY CONTROL SAMPLE: 375856

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Suspended Solids** mg/L 239 242 101 80-120

SAMPLE DUPLICATE: 375857

1275480004 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 30.0 0 10 Total Suspended Solids 30.0 mg/L

SAMPLE DUPLICATE: 375858

Date: 09/29/2016 03:32 PM

ParameterUnits1275478001 ResultDup ResultRPDMax RPDQualifiersTotal Suspended Solidsmg/L188196410

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



### **QUALIFIERS**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

**RPD - Relative Percent Difference** 

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### **LABORATORIES**

Date: 09/29/2016 03:32 PM

PASI-DUL Pace Analytical Services - Duluth
PASI-V Pace Analytical Services - Virginia

(218) 742-1042



### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: NPDES TB-Wk3

Pace Project No.: 1275294

Date: 09/29/2016 03:32 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1275294001	SD 001 (Seep 020)	EPA 1664A TPH (1999)	95419		
1275294001	SD 001 (Seep 020)	USGS I-3765	95421		

CHAIN-OF-CUSTODY / Ar The Chain-of-Custody is a LEGAL DOC WO#: 1275294

SAMPLE ID  Sample (das must be unique  These of the control of the	[ mattile DATE Signed: 9-H-76
SAMPLE ID  SAMPLE ID  One Character per box.  (AZ, 0-9/, )  Sample ids must be unique  Thus.  SENDING (Seep 020)  WIT  ALTERNATION AND COMMERTS  WIT  SAMPLE TYPE (G-GRAB C-COMP)  WIT  SAMPLE TYPE (G-GRAB C-COMP)  WIT  ALTERNATION AND COMMERTS  WIT  SAMPLE TYPE (G-GRAB C-COMP)  WIT  ALTERNATION AND COMMERTS  WIT  ALTERNATION AND COMMERTS  WIT  ALTERNATION AND COMMERTS  WIT  ALTERNATION AND COMMERTS  WITH COMMERT  WITH COMMERTS  WITH COMME	7.4%
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SAMPLE ID  Sample Ids must be unique  SAMPLE TYPE  SAMPLE TYPE  SAMPLE TEMP AT COLLECTION  MATRIX CODE  SAMPLE TYPE  SAMPLE TIME  SAMPLE TEMP AT COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	
SAMPLE TEMP AT COLLECTION  Was ample to smust be unique  SAMPLE TYPE  SAMPLE TEMP AT COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	
SAMPLE TEMP AT COLLECTION  SAMPLE TEMP AT COLLECTION  SAMPLE TEMP AT COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	
SAMPLE TYPE  SAMPLE TYPE  SAMPLE TEMP AT COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	
SAMPLE ID  Sample Ids must be unique  Tissue  Time	
SAMPLE ID  Sample lds must be unique  SD 001 (Seep 020)  SAMPLE ID  SAMPLE TYPE  SAMPLE TYPE  SAMPLE TYPE  SAMPLE TYPE  SAMPLE TIME  SAMPLE TO COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	
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SAMPLE ID  SAMPLE ID  Sample ids must be unique  SD 007 (Seep 020)  SAMPLE TEMP AT COLLECTION  Working Waler  W	
SAMPLE ID  Sample Ids must be unique  SAMPLE TIME  SAMPLE TIME  SAMPLE TEMP AT COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	
SAMPLE ID  Sample Ids must be unique  SAMPLE TEMP AT COLLECTION  # OF CONTAINERS  Unpreserved  H2SO4	×
odes to left) C=COMP)  COLLECTED	Methanol Other Analyses-Test: TSS TRPH 1664
	₩ ₩
	neather.zika@pacelabs.com,
ted Due Date: Project # Project #	
Fax Project Name: NPDES-TB Wk/3	
Purchase Order #:  Project Name: NPDES-TB Wk3  Ted Due Date:  Project #:  Project #:	
S. P.O. Box 417 Copy To:  , MN 55768 Purchase Order #:  Purchase Order #:  Project Name: NPDES-TB WAG  Project #:	USS CO
ry         USS Corporation         Report To: Tom Moe           s         P.O. Box 417         Copy To:           ,MN 55768         Purchase Order #:           ted Due Date:           Fax         Project Name: NPDES-TB W/k3           ted Due Date:           Project Mame: NPDES-TB W/k3	PM: MMW Due Date:
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# nce Analytical

Document Name:

Sample Condition Upon Receipt Form

Document No.: F-VM-C-001-Rev.09 Document Revised: 23Feb2015

Page 1 of 1

Issuing Authority:

WO#: 1275294 Sample Condition Upon Receipt Client Name: Project #: TUSPS Courier: Fed Ex Commercial Pace Other:\_\_\_ Tracking Number: Optional: Proj. Due Date: Proj. Name: Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Packing Material: Bubble Wrap Bubble Bags None Other: Temp Blank? Yes No Thermometer Used: 🛮 140792808 Type of Ice: Wet Blue None Samples on ice, cooling process has begun Cooler Temp Read °C: 2.7 Cooler Temp Corrected °C: 2.8 Biological Tissue Frozen? Yes No Temp should be above freezing to 6°C Correction Factor: 0.3 Date and Initials of Person Examining Contents: Ch. 9-21-16 Biological Tissue Frozen? Yes No NA Chain of Custody Present? □No □N/A Chain of Custody Filled Out? Yes No □N/A Chain of Custody Relinquished? □No □N/A Sampler Name and Signature on COC? Yes □No □N/A Samples Arrived within Hold Time? No □N/A Short Hold Time Analysis (<72 hr)? □N/A Rush Turn Around Time Requested? No Yes □N/A Sufficient Volume? Yes ΠNo □N/A Correct Containers Used? **Z**Yes No □N/A 9. -Pace Containers Used? □No □N/A Containers Intact? Yes No □N/A Filtered Volume Received for Dissolved Tests? ZN/A ☐ Yes □No 11. Note if sediment is visible in the dissolved containers. Sample Labels Match COC? Yes □No □N/A 12. -Includes Date/Time/ID/Analysis Matrix: See pH log for results and additional preservation All containers needing acid/base preservation will be Yes □No checked and documented in the pH logbook. documentation **Ø**N/A Headspace in Methyl Mercury Container Yes □No 13. /<sub>N/A</sub> Heads pace in VOA Vials ( >6mm)? Yes □No 14. Trip Blank Present? Yes No **₽**N/A 15. Trip Blank Custody Seals Present? Yes []No **⊠**N/A Pace Trip Blank Lot # (if purchased): CLIENT NOTIFICATION/RESOLUTION Field Data Required? Yes No Person Contacted: Comments/Resolution:

FECAL WAIVER ON FILE

TEMPERATURE WAIVER ON FILE

Project Manager Review: (

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

# Intra-Regional Chain of Custody



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Cooler Temperature on Receipt O · \ °C			2	Tat of	Released By						SD 001 (Seep 020)	e ID	loods	Pace Analytical Virginia 315 Chestnut Street Virginia, MN 55792 Phone (218) 742-1042		Workorder: 1275294 Wor
-0-1			1								PS	Sample Type				korder
ငိ			<b>Y</b>	Pe							9/21/20	Collect ु Date/Time				Name:
Cus			4/22/6/6CO	4/62/16/40	Date/Time						9/21/2016 10:40	t ime		Pace Analytical Duluth 4730 Oneota Street Duluth, MN 55807 Phone (218) 727-6380	Send To Lab:	Workorder Name: NPDES TB-Wk3
Custody Seal (Y)or				, (	क्र						1275294001	Lab ID		lytical Di ota Stre N 5580: 18) 727-	1 <b>b</b> :	TB-Wk
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<sup>\*\*\*</sup>In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

USPS Other: No Type of I Corrected Cotor: Yes	Seals Income Concer Seals	Project #  lient  ntact?  Other:  Wet  Date and	Ontional: Proj Due Date: Proj Name
USPS Other: No Type of I Corrected Cotor: Yes	Seals Ir	Project # lient  ntact? _ \sum_ Other: _ Wet	Optional: Proj. Due Date: Proj. Name  Temp Blank? Yes □  Blue □ None ☑ samples on ice, cooling process has □  Biological Tissue Frozen? □ Yes □ No  Initials of Person Examining Contents: □ Yes □ No
USPS Other: No  Type of I Corrected *Coctor: Yes	Seals Ir	other:  Date and	Proj. Due Date: Proj. Name  Temp Blank? ✓ Yes   Blue None Samples on ice, cooling process has   Biological Tissue Frozen?   Yes No   Initials of Person Examining Contents:
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¥¥es	□No	□N/A	9.
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<b>∑</b> ⇒es	□No	□n/a	10.
	∏No		11. Note if sediment is visible in the dissolved containers.
	□No		12.
′			
			See pH log for results and additional preserva
Yes	□No	<b>∏</b> N/A	documentation
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hold, incorrect preservative, out of temp, incorrect containers)

Document Name:

Document Revised: 22Jan2016

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